

CISCO ITES SOLUTIONS

Wipro Spectramind Deploys Cisco's Next-Generation WAN Switching Solutions



Overview: Wipro Spectramind

The IT enabled services arm of Wipro Technologies, Wipro Spectramind is one of the largest third-party offshore business process outsourcing provider in India.

The company is a full service provider of BPO services to the Fortune 1000 corporations the world over, and offers a comprehensive set of service lines including inbound/outbound customer service, technical support, telemarketing, internal helpdesk, finance and accounting services, HR services as well as industry specific processes such as in airlines (reservations), healthcare (claims adjudication), banking (mortgage processes), retailing (decision analytics) and knowledge services.

The Need

Wipro Spectramind wanted to build a network that would support 15000 - 20000 agents (up from the current 5000) in the next 2-3 years. Greater network scalability, higher redundancy and lower downtime would enable its customers higher flexibility and an ability to work on tighter SLAs.

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The Challenge

Wipro Spectramind wanted to migrate from the E1-based ATM cloud that it was using to T3-based IPLCs (International Private Leased Circuits).

It wanted to run PNNI routing protocol in the core which is more scalable than the auto-route on the existing IGXs. Another critical requirement was preserving its existing investments in the IGXs, so the proposed solution should continue to support IGXs as edge devices, and should work across an MGX PNNI core.

Also, Wipro Spectramind had three concerns. First was the cost of ownership of the solution. Second was the time frame to implement the project and the third was the solution design itself.

Choosing Cisco

With a view to incorporating best practices in the implementation of its WAN switching network, Wipro Spectramind looked to Cisco. Cisco's assistance with the network audit, ongoing network design reviews, and guiding the various TAC cases, brought fast closure to the project.

In addition to Wipro Spectramind's requirements, Cisco had to overcome its competitor, who had tried to position VoATM switching over Cisco's VoATM trunking, citing that its technology would use less bandwidth per channel with the same codecs.

Solution Design

The Cisco team succeeded in highlighting the advantages of VoATM trunking with sub-cell multiplexing, by demonstrating how voice transportation on MGXs could be made more efficient, and by the availability of powerful features in advanced technologies such as MPLS which are supported on an MGX-based network.

MGX 8850 with PXM45 was positioned by the account team as a highly scalable box with great switching capacity, and fast PNNI routing capabilities, with T3 and E1 trunks on the same box, with continued support for high voice port density.

The proposed design met Wipro Spectramind's expectations of a high-speed T3 based PNNI core, and also took care of utilising existing IGXs as virtual trunking nodes, and existing MGXs as edge nodes, again running PNNI between them.

The entire project fell into place extremely well. For a smooth and easy migration, all configurations for the MGX's, as well as the implementation and management plans, were made in advance and verified by Cisco. All cables and connectors were tested ahead of schedule, and a centralized team was setup for the configuration and commissioning of the circuits.

Proof of Concept

Wipro Spectramind wanted to preview how the proposed network would work in a simulated environment, before they moved towards real life deployment and equipment purchase.

To demonstrate how the network would behave in real life, Cisco positioned the Customer Proof of Concept at CPOC lab in San Jose. The demonstration bolstered Wipro Spectramind's confidence in the proposed design, and also enabled its key personnel to gain more hands-on experience.

All the tests carried out at Proof of Concept stage proved immensely useful, as they helped to shorten the implementation timeframe.

Network Optimization Services

The Cisco Network Optimization Services was provided to Wipro Spectramind, on a two-year contract, to address the company's concerns that the entire IGX/MGX network is optimized, and follows the best practices, including other deliverables in the NOS engagement.

End Benefits

Even in a complex network, which handles a large number of calls per month, the re-routing time are within manageable limits now, thanks to the PNNI in the MGX network. The bandwidth utilization per call is extremely efficient, and has been fine -tuned further with recommendations from Cisco.

The MGX-based network has facilitated a smooth migration path from sub-rates/E1s on IGXs to E1s and DS3s and going up to STM-1 and more on the MGXs, and that has been achieved by seamless integration of IGXs in the network as well.

The MGX has features that allow the connections (voice/data) to be preserved in the event of link failures/flaps when the connections are being re-routed.

The network delivered enhanced features like preferred routing, VoIP, and VoATM on same hardware, as well as support for voice trunking and voice switching on the same hardware, mix and match of signaling like CAS or CCS on any port of the VISM-PR, in-built high end routing functionality on MGX module, efficient bandwidth

utilization, faster re-routing of connections, in addition to unique features like AIS suppression (feature which allows the voice calls to be preserved during link flaps/failures).

Following the implementation, Wipro Spectramind achieved reliability levels of "five nines" - which is the best possible, for a contact centre that runs 24X7X365!

Expressing his satisfaction at the deployment, *Mr. Sunil Gujral*, *Vice President*, *Wipro Spectramind* said, "I believe this has been an excellent investment because it meets all of our requirements of network availability, continuous uptime and scalability. Cisco is best placed to understand and fulfill the requirements of our customers in the BPO industry."

Mr. B. Ashok, Senior Vice President, Cisco Systems said, "Cisco's ability to deliver customized and large-scale solutions for Indian BPO service providers has been infallibly proven with the deployment at Wipro Spectramind. We are confident that this is the solution that the Indian BPO companies need to adopt, which in turn will help them offer value added services to customers."